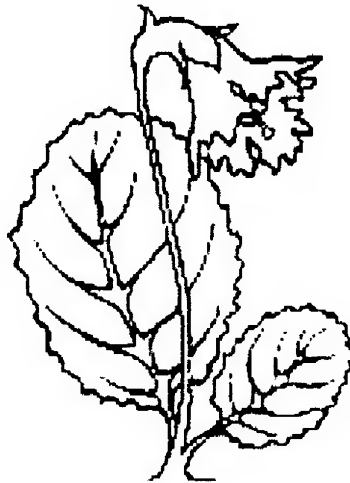


SHORTIA
NEWSLETTER OF THE
WESTERN CAROLINA BOTANICAL CLUB
SUMMER 2015



Shortia galacifolia

Oconee Bells



President
Vice-President

Juanita Lambert
Penny Longhurst

Secretary
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Joy Charlebois
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MEMBER NEWS

Field Trip Cancellations: Occasionally, field trips must be cancelled or changed either for weather conditions or other reasons such as road closings. Such changes are sent out by email to all members by 7 AM the day of the field trip. If you do not have email access, please call the leader, co-leader, or recorder (whose phone numbers are listed on the schedule) to be sure that the walk is going to go as planned. Indoor programs are canceled when Henderson County Schools are closed (see <http://www.hendersoncountypublicschoolsnc.org>) but NOT necessarily cancelled because of delayed opening.

For any change of address, email or telephone number, please inform Alan Graham, 544 Tip Top Road, Brevard, N.C., 28712. 828-884-3947



President's Message

Our activities on WCBC outings consist mostly of identifying and appreciating wildflowers and other plants in natural settings. This is really just scratching the surface of botanical studies. The significance of a plant can be considered from two opposite perspectives. On one hand we have the usefulness of the plant to mankind, which can be quite varied and significant. On the other hand, what role does the plant play in the natural world? It is this latter aspect of plants that I would like to address here, though only superficially in this limited space.

In the natural world, plants grow in communities with other plants, sometimes benefiting from them and sometimes competing with them. From our gardening books, we know that the thermal, moisture, nutrient, and light conditions influence the growth of plants. Within a community, these conditions are modified by the presence of other plants in the community. The interactions between plants in their communities can be quite complex, but ecologists simplify the complexity by defining a limited number of community "types" found in a geographic region.

Timothy Spira of Clemson University has done this for the Southern Appalachians and adjoining Piedmont province. In his book "Wildflowers and Plant Communities of the Southern Appalachian Mountains and Piedmont", he defines twenty-one plant communities ranging from the highest peaks down to the fall line, the upper limit of the coastal plain. In principle, every natural area within this region should fall into one of these communities.

Many (most?) of our botanical forays are to such natural areas, and with an awareness the various plant communities' species compositions, as enumerated by Spira, we should be able to ascertain which type of community we are exploring. I believe this awareness would give us a greater appreciation of the botanical world here in the Southern Appalachians that we so love.

I suggest that we try to determine which types of communities we are passing through during our outings. This should not be too difficult, though I must admit it will be a learning experience for me. The geographic location of the outing will be a good indicator, and often just the presence of a few key species will indicate the communities we will encounter. Larason has made a spreadsheet of the species Spira lists for each community, and copies can be made available to members wanting to make this effort.

Let's discuss this possible new dimension of our outings, perhaps at both our scheduling meeting or at a board meeting. I would be interested in your responses to such an effort.

New Members

Audrey Stelloh I moved to Hendersonville from Chapel Hill, NC, in 2010 when I married. I had been employed as a research technician doing DNA sequencing in Chapel Hill. I enjoy gardening and native plants and I make mosaic stepping stones. I love hiking in the woods with my dog Gus.

Robert and Jolene Overbeck We just moved to Brevard in November from Westchester, New York and Washington DC. We have lived in various parts of the country: Minnesota, Iowa, Illinois, California, Pennsylvania, Arizona, etc. but never in the south. We love mountain biking, hiking, surfing, photography, music, motorcycling, visual arts, birding and are very much looking forward to learning about wildflowers. Jolene was a Chief Marketing Officer at a global law firm, and Robert a computer programmer. We are retired with two children and a grandchild living in the San Francisco Bay area. We are very eager to learn about identifying native plants and hope that we're not a nuisance with all our questions. [No indeed! All of us in the Botany Club love questions!-ed.]



Is it False Hellebore or is it Appalachian Bunchflower?

by Penny Longhurst

If you've been on spring walks with us recently you may have noticed some differing opinions about the identity of those large lily-like leaves we've been seeing on some of the trails. When we first moved to Transylvania County I was thrilled to see dozens of these leaves on our property expecting to see some fantastic flowers appear. But years passed and the plants never bloomed, so identification was impossible. Then one day I found a photograph online that was taken at Max Patch by Kevin Adams. It showed large numbers of the same leaves and identified them as Appalachian bunchflowers. Since then I have occasionally found a plant with flowers, and was finally able to identify the "lily that never blooms" as *Veratrum parviflorum*.

Veratrum parviflorum (Appalachian bunchflower, formerly *Melanthium parviflorum*) has stalked, mostly basal, elliptical leaves less than 8 inches long. It has a limited distribution, occurring in dry woods in the Appalachians from the Virginias to Georgia and eastern Tennessee. When it blooms, the flowers occur on a stem that is about 3 feet tall. The blooms are small (maybe ½ inch across), yellow-green, and hairless, and the overall appearance is delicate. Large numbers can be seen along the Talking Tree trail at Holmes Experimental State Forest.

In contrast, False Hellebore (*Veratrum viride* var. *viride*) has a wider distribution, but is much less common in the southern Appalachians than in the northeastern states. It is my impression that in this area it is located primarily at higher elevations, such as along the Blue Ridge Parkway. It is a stout wetland plant, 2 to 6 feet tall, with large, heavily ribbed, alternate, yellow-green leaves up to 12 inches long, but generally narrower than those of *V. parviflorum*. The sessile leaves clasp and continue up a thick stem that bears a branching cluster of greenish, star-shaped, hairy flowers at the top. The stems and flowers are larger than those of *Veratrum parviflorum*. The ribbed, yellow-green leaves of this wetland plant are conspicuous in spring; the plant withers away before summer. Good examples can be seen along the creeks that feed Douglas Falls, at Bear Pen Gap, and on the Mountains to Sea trail near Buckeye Gap.

Veratrum viride is highly toxic to humans and livestock. All parts are poisonous, especially the young, succulent growth in spring. Despite the toxicity, the plant was considered to have magical properties by many Native American tribes who used it for talismanic and ceremonial purposes, as well as to treat conditions including hair loss, pain, and madness. One report says that *V. viride* was used by some tribes to elect a new leader. All the candidates would eat the root, and the last one to start vomiting would become the new leader! The plant is also used in homeopathic preparations to slow the heart rate and decrease blood pressure. I was unable to find any information concerning the toxicity of *V. parviflorum*. However, from experience, I can report that deer eat the leaves voraciously; sadly with no apparent ill effects!



Veratrum parviflorum
Appalachian Bunch Flower



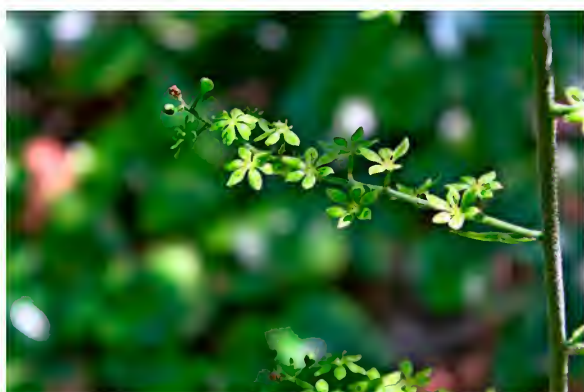
Veratrum viride var. *viride*
False Hellebore



Veratrum parviflorum
Appalachian Bunch Flower



Veratrum viride var. viride
False Hellebore



Veratrum parviflorum
Appalachian Bunch Flower



Veratrum viride var. viride
False Hellebore



A Murder In Passing

by Mark de Castrique

Reviewed by Penny Longhurst

On May 1, WCBC's scheduled walk was the Kingdom of the Happy Land. Coincidentally, I had been reading a series of books by a local author, Mark de Castrique. His Sam Blackman series is set in well-known locations around this area such as the Biltmore House, Grove Park Inn, and Connemara. Book 4, A Murder in Passing, is set in the Kingdom of the Happy Land, and Ed Bell, our co-leader for the WCBC walk and one of the owners of the property, is even a character in the book. In each of the books, historical persons and events are interspersed with the current day mystery.

At the beginning of A Murder in Passing, private eyes Sam Blackman and Nakayla Robinson take part in a Blue Ridge Mushroom Club field trip to the Kingdom of the Happy Land. During the hunt for *Laetiporus sulphureus* (Chicken of the Woods) Sam trips, smashes into a fallen log, and discovers an old human skeleton hidden inside. (There really is a Blue Ridge Mushroom Club as well as an Asheville Mushroom Club).

The following day the story of the grisly discovery runs in both the Asheville and Hendersonville newspapers. Later that morning a young African-American woman, Marsha Montgomery, shows up at the detective agency. She asks Sam and Nakayla to investigate the 45 year old theft of a photograph by Doris Ullmann, renowned photographer of Appalachian mountain people, which shows her great grandmother, grandmother, 5-year-old mother, and some other children at the site of one of the original cabins in the Kingdom of the Happy Land. The women are descendants of the freed slaves who lived in the Kingdom. A fair amount of time is spent describing the history of the Kingdom as well as the life of Ullman and her relationships with Pulitzer prizewinning author Julia Peterkins and John Jacob Niles, an American composer, singer, and collector of traditional ballads, as they passed through this area.

Sam and Nakayla are suspicious about this coincidence, and it turns out that Marsha suspects the robbery had something to do with the mysterious disappearance of her father at about the same time. Shortly after this Marsha's mother, Lucille, who is now 85, is arrested and charged with the murder of Jimmy Lang, her missing lover and Marsha's father, whose body the police suspect is hidden in the tree.

The plot revolves around the US Supreme Court decision in the summer of 1967 that ruled prohibiting interracial couples from marrying was unconstitutional. Despite this Lucille had refused to marry Jimmy, who was white, because she felt that his family business would be adversely affected if he married a black woman. It was shortly after this that Jimmy disappeared. Lucille and Jimmy's twin brother were never sure if he simply ran away or if something untoward had happened to him.

Solving the mystery involves a trip to the John C. Campbell Folk School, meals at well-known local restaurants, some mysterious assaults on army vets including the president of the Mushroom Club, several return visits to The Kingdom, and of course, finding the missing photograph. There's quite a twist at the end, but if you want to know who dunnit and why, you'll need to read the book yourself!

More information on the Kingdom of the Happy Land can be found at <https://kingdomofthehappyland.wordpress.com/history/>



Rosa carolina – Carolina Rose



Rosa palustris – Swamp Rose

Our Native Roses

by Lucy Prim

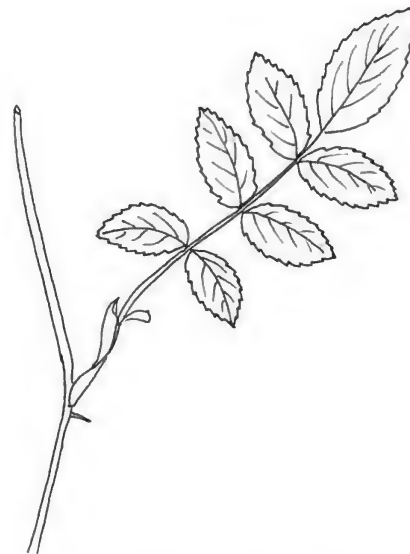
When the hot summer days come to our mountains, the dainty woodland flowers we see in the early spring have mostly faded away. But there are a host of lovely flowers that bloom in this hot season, and among the loveliest of these are our native roses. Although opinions differ as to the number of native roses we have here in the mountains, we certainly have the Swamp Rose and the Carolina Rose. Depending on what source I read, we might have the Virginia Rose and the Climbing Prairie Rose too.

The Swamp Rose, *Rosa palustris*, is a rose I think we regularly see on our outings to Lewis Creek. A big healthy bush is growing near the road, and we see it just where we leave the parked cars and start our walk across the meadow. As its name implies, this rose likes wet areas. It can even live in standing water! The sweet pink flowers beckon and those of us who walk up close to the bush, hoping no rattlesnakes are hiding under the brambles, can smell the loveliest fragrance from those beautiful pink blossoms.



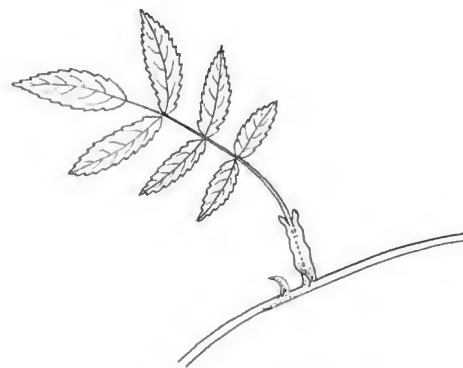
Rosa palustris – Swamp Rose
Curved prickles, very narrow stipules with smooth margins

A rose that grows in drier areas, and whose flower looks very much like the Swamp Rose, is the Carolina Rose, *Rosa carolina*. The Carolina Rose grows in drier areas such as upland forests, and the edges of pastures and woodlands. There are a few features that can help us distinguish it from the Swamp Rose besides the location in which it is typically found growing. It is said to have very straight, narrow prickles, while the Swamp Rose has curved prickles. The flowers of the two look very similar, except the center of the Swamp Rose has a little circular area of flattened pistils that is often a lovely pinkish-orangey color. This little button looks quite pretty surrounded by the pink petals.



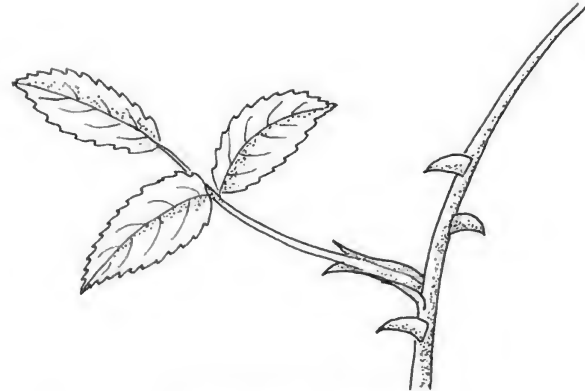
Rosa carolina – Carolina Rose
Straightish prickles and stipules with smooth margins

The Virginia Rose, *Rosa virginiana*, is very similar to the Swamp Rose. It differs in having dark green shiny leaflets and coarser teeth. It also has wider, leaf-like stipule at the base of each compound leaf while the Swamp Rose has a very narrow stipule. The flowers of the Virginia Rose occur in small clusters more frequently than those of the Swamp Rose.



Rosa virginiana – Virginia Rose
Curved prickles and stipules with smooth margins

The fourth rose we may have in this area is the climbing Prairie Rose, *Rosa setigera*. The flowers of this rose look very similar to the others, but they do not have the flattened disc of pistils in the center, but instead have a narrow column of pistils. The leaflets are fewer in number. Instead of the usual seven, this rose typically has only three, and rarely five, leaflets. The flowers of the Prairie Climbing Rose are light pink to rosy pink and fragrant. They are 2-3 inches across and grow in clusters at the ends of the stems, often opening one or two at a time. When there are no flowers to guide us in identifying this rose and we wish to distinguish it from the Multiflora Rose, we can look at the stipules at the base of the compound leaves. The Multiflora Rose has comb-like hairs at the base, while this rose has two winged stipules without comb-like hairs. The prickles are short and stout and slightly curved. The canes grow very long, up to 15 feet. Bowers of Prairie Climbing Rose can be 8 feet high.



Rosa setigera – Prairie Rose
Curved prickles; Stipules with smooth margins

These four native roses are lovely to have in our woods. But there is a rose we might very well find growing, that has some undesirable features, even though it looks lovely right now, blooming in luxuriant bowers beside Little River Road. It is the Multiflora Rose, an exotic invasive from Asia that was brought here by Europeans in the 1700s to be a pretty garden plant and to create a “living fence” that would help contain animals. This rose could indeed create a living fence the way it climbs and clambers over itself forming the most dense, impenetrable thickets. It has small, one inch wide white flowers which grow in clusters rather than the single blooming bigger pink or pale pink flowers of the Carolina and Swamp Roses.

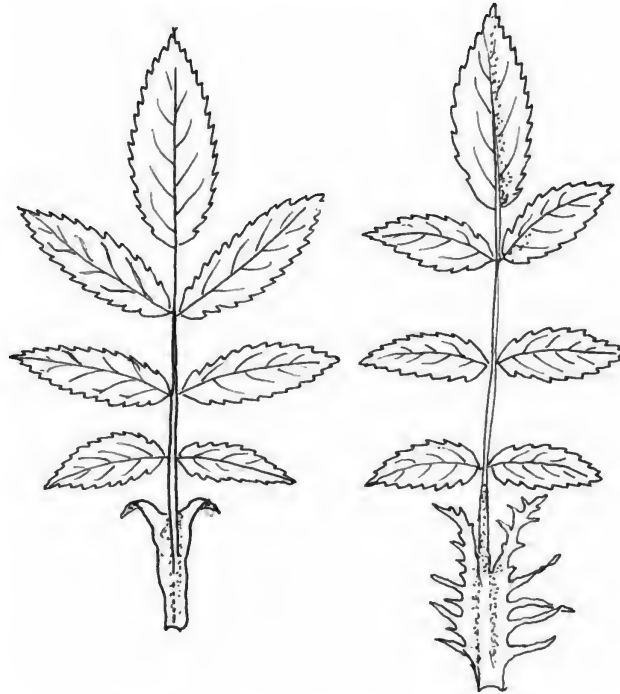


Rosa multiflora – Multiflora Rose
Curved prickles with fringed stipules

The feature that may be most useful for distinguishing the Multiflora Rose from our native roses is its stipule. Our native roses have stipules with smooth or faintly ciliated margins. The Multiflora Rose has stipules that have markedly fringed, feathery margins.

What is a stipule?

If you pull a compound rose leaf off the stem, you can easily see the stipule. It is an appendage that extends from the base of the leaf up the leaf an inch or two.



**Stipule with
smooth margins**

**Stipule with
fringed margins**

(Fringes slightly exaggerated and enlarged to show this feature better)

While writing this article for Shortia, I came upon three beautiful pale pink roses on a dainty arching branch in the woods on top of Little Glassy Mountain, at Connemara. I was so delighted to be able to key this rose out, using my newly gathered information on native roses. But much to my dismay, this little rose did not fit any of the descriptions! At first glance, it definitely looked like a Carolina Rose. There were three pale pink flowers open, each about 2 across, blooming singly at the ends of a stems. The base of each leaf was sheathed with a smooth stipule, not the fringed stipule of the Multiflora Rose. It had fairly straight prickles, but some were more straight than others, and some were definitely slightly curved. It was growing all by itself in a dry woodland area. It was a wispy little bush, and if the branches hadn't been seven feet long and arching, I would have confidently thought it was a Carolina Rose. Carolina Rose is supposed to be shorter than that. But even with its long branches and slightly curved prickles, I think most of its features point to it being a native Carolina Rose. After all, with the bumblebees going back and forth from rose to rose, it should not surprise us that roses do not always exactly fit their descriptions in books!



A Wild Rose

A blushing wild pink rose,
By tangled woods and ways,
A passing sweet that goes
With summer days.

From rosy dawn till night
Wafted from east to west,
Kissed by the morning light
To evening rest.

Thy odors faint outlive
Alike both joy and pain,
Stealing the sweet they give
To yield again.

Leaving a faint perfume
Thy memory to fulfill,
Forgotten in thy bloom,
Remembered still.

Sarah Orne Jewett



Thorns, Spines, and Prickles

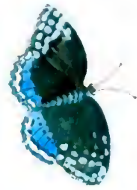
Prickle – a structure that derives from the epidermal tissue or outer bark. You can easily detach it by pushing it to the side. Roses have prickles.

The difference between “thorns” and “spines” eludes me.

A thorn is described as “a spiny outgrowth of wood, or a stem modified as such”. Hawthorns have thorns.

A spine is described as “a woody, strong sharp point emerging from the wood of the stem”. Locusts have spines.

Gray's Manual of Botany defines the word “thorn” as “same as spine”.



Violets and Fritillary Butterflies

by Lucy Prim

There were not many flowers blooming last April third, as we slowly wound our way along the paths at Flat Rock Park. Aside from Dead Nettle, Gill Over the Ground, and lots of Dandelions we saw hundreds of Common Blue Violets growing at the base of the giant Tulip Poplars and along the banks of the little creeks that flow through the park. Bonnie Arbuckle remarked that although she used to pull up the violets in her garden, she now has decided to let them stay because Violets are the host plant of almost all Fritillary Butterflies!

Fritillary butterflies are distant cousins to monarchs, though they do not make a long journey to Mexico the way Monarchs do and their caterpillars do not feed on Milkweeds. Instead of Milkweeds, almost all fritillary caterpillars feed exclusively on Violets. The females mate in the summer, then after taking a several weeks long nap called a diapause, they lay their eggs in the sorts of places where violets can be found. The females seem to be able to find these favorable places even when the violet leaves have completely disappeared. After hatching, the caterpillars nestle into the leaf litter on the forest floor and remain there all winter. When spring arrives, they come out and feast on the newly emerged violet leaves. They eat during the night, then crawl back into the leaf litter in the morning and stay there all day, safe from the eyes of hungry predators. If you look at violet leaves in the woods you can sometimes see irregularly shaped holes, possibly left by these little feeding caterpillars.

One of these Violet eating Fritillaries is the Diana Fritillary, *Speyeria diana*. The males and females look very different from each other, the female being dark blue and somewhat larger than the orange and black male. Not only is this butterfly remarkably beautiful, it is also rare and considered a threatened species. It has been spotted in the Wilderness Bridge area, where we sometimes go on our Botany Club walks. Maybe one day we will see one!

So, as we tend to our gardens, we might decide to let violets to grow. They are lovely in the spring, covered with their blue and yellow and white flowers. We can watch for irregular holes in the leaves, and wonder what little caterpillars are nibbling at them during the night. On spring and summer days as we hike in the woods, we might catch a glimpse of a fritillary, flitting about and nectaring amongst the Milk Weeds and Joe Pye. And if we're extremely lucky, we might even see the most rare and exquisite fritillary of them all, the lovely Diana Fritillary.



SHORTIA
c/o Lucy Prim
48 Oak Gate Drive
Hendersonville, NC 28739

FIRST CLASS

SHORTIA

A quarterly publication of the Western Carolina Botanical Club

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Editor: Lucy Prim [32Lucette@gmail.com]
Summer 2015

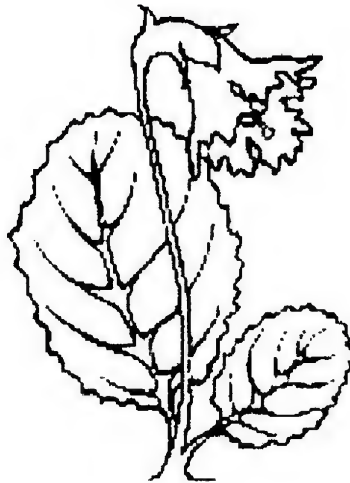
Proof-reader: Dave Lellinger

The purpose of the Club is to study the plants of the southern Appalachian Mountains and the Southeast through field trips and indoor meetings. **Membership is open to all.**

Individual/family memberships are \$15. New members joining from the period July 1 - December 31 pay \$8. All memberships are renewable on January first of each year. Send dues to Alan Graham, 544 Tip Top Road, Brevard, NC 28712.

Please send me Botanical Articles or stories or tips on plant identification that you think would be good to include in one of our SHORTIAs. If you see anything that needs correction or if you have additional information about a subject or perhaps a personal experience related to a subject, send that in too, and I can include it in a future SHORTIA. Please try to get this to me by **August 20th** to include in the FALL issue.

SHORTIA
NEWSLETTER OF THE
WESTERN CAROLINA BOTANICAL CLUB
FALL 2015



Shortia galacifolia

Oconee Bells



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President's Message

I'm hoping the next year will be a great one for the club. For me it can only get better... Recently I went into my garden to deadhead the Buddleia (yes, I confess we have one) and as I went around the corner of the house a gray squirrel came leaping out of a Viburnum, smacked me in the face, and beat a hasty retreat! I'm not sure which of us was more surprised! When I got indoors I had a large bleeding scratch on my nose and a horrible headache. Who'd have thought squirrels can be more dangerous than bears?

Have you ever seen the handmade cards with a painting of wild flowers that we use to send get well wishes and offer condolences to club members, or to enclose honoraria for our outside speakers? They are made by and generously donated by Lucy. Many thanks, Lucy. They are beautiful and we all appreciate your talent and your gifts.

Mary Kathryn Hardman has taken the Club scrapbooks to the Transylvania County Library in Brevard. They are located in the gardening/outdoor section in the North Carolina Collection room on the second floor. If you want to take a look, just ask Marcy Thompson, the staff member in charge of the Collection, and she will show you where they are.

How far back do you remember reading Shortia? The first issue was published in spring, 1979. I've been digitizing and browsing the old issues. There are some really useful articles,

especially Dick Smith's column "Look Again!" and a series entitled "Those Latin Names" by Betty Jones. It's also interesting to read the Recorder/Historian's Reports and see that many of our favorite field trip locations have been on the schedule for years. For instance, Craggy Gardens (first mentioned in 1980); Hardy Souls, Table Rock State Park, Davidson River, Buck Springs trail, Frying Pan Gap trail, and Holmes State Forest (1982); Sherwood Forest, Shut-In trail, and Blue Ridge Parkway (1983); and Jones Gap, Whiteside and Pilot Mountains, and Millie Pearson's trails (1984). After collecting data for many of the field trips, lists of plants likely to be encountered were first provided in 1991. I wonder how many of the plants that were found then are still located in the same spots. I was surprised to see that hikes to the top of Looking Glass Rock and Mount Pisgah were also scheduled. We were an energetic group back then!

So far, I've finished scanning Volumes I, 1979 to XVII, 1995, and the hard copies have been placed in the North Carolina Collection room at the library. Only 20 more years to go! We're hoping that sometime soon we'll also be able to make the digitized copies of Shortia available on the Web as PDF files. I'll let you know when and where we get to on that.

Final word: If I knew then what I know now, I would have picked up more acorns last year!



Western Carolina Botanical Club Car Stickers



When Bonnie Arbuckle was going through some of her things recently, she came upon some beautiful embroidered Botany Club patches! They were with a letter dated 1994, from Dorothy Rathman, who was president of the club in 1993-1994, to Elaine Montgomery, the Treasurer. The letter stated, "Herewith two WCBC patches, slightly used, which were given to me by an inactive member. Perhaps you could sell them to new members..." The patch is really lovely, and Penny has figured out how to make it into a car sticker. If anybody would like one, it would cost between \$3.00 and \$5.00. Let Penny know if you'd like one, and she will get some made up for us. I know I want one for my car! 828-885-2926

longhurst_penny@hotmail.com

A Tribute to Bonnie Arbuckle

by Jeanne Smith

(This presentation was made by Jeanne at our annual picnic in July. Congratulations to Bonnie!)

Once upon a time, a long, long time ago (specifically in 1972), an odd assortment of homo sapiens—short ones, long ones, round ones, hungry ones—attended a most informative series of classes on wildflowers, which they found so enjoyable that these short, long, round, hungry homo sapiens decided to form a BOTANY CLUB. They elected a leader and drew up a schedule of walks in the woods. Over the years, this wild bunch—the short, long, round, and hungry—were led in turn by a horticulturalist, an agronomist specializing in bugs, an author of a wildflower book, a weatherman, and a roving photographer, among others.

Early in the 1980's a Lovely Lady joined the botany club. To begin with, this Lovely Lady volunteered to record all the blooming plants in the woodsy walks, educating herself as well as botany club members.

When the club voted to adopt a native woodland garden at what is now Bullington Gardens in Hendersonville as a garden project in exchange for winter meeting privileges for the club, the Lovely Lady was one of a team of club members who volunteered almost weekly as gardeners and trail makers, and served as de facto team leader.

All during her years of membership, this Lovely Lady acted as hostess and planned scheduling meetings at her home, surrounded by her wildflower garden, from which she shared plants with Bullington Gardens and short, long, round, hungry club members. The club rewarded this Lovely Lady by asking her to serve as our President three times; in 2001, 2003, and 2004!

This story is not a fairy tale but a meager list of the achievements of a Lovely Lady the club is privileged to honor as a member and a leader. As a tiny token of our vast esteem, the Western Carolina Botanical Club presents this plaque to Bonnie Arbuckle.



In addition now, to reward Bonnie for her dedication to the club, we take great pleasure in awarding her LIFE MEMBERSHIP in the Western Carolina Botanical Club.

Millie Pearson Shares Some Local History

by Lucy Prim



Penny and I met Millie Pearson at the Purple Onion in Saluda on a hot Monday afternoon, July 27, 2015. We found a table at the back of the restaurant. We wanted to hear about Millie's life and her time in the Botany Club.

Millie was born in 1927, the eighth of ten children. She was born in the big white house right next to the house she lives in now, just down the road from Pearson's Falls.

Her father loved nature and knew the names of the trees and flowers growing round about. Before she was born, her father decided he wanted to buy the piece of property that contained Pearson's Falls. He didn't know who owned the property so he went to the court house, looked in the records, and learned that someone in New York owned it, maybe a carpetbagger who had come south after the Civil War, buying up property cheap. The owner was willing to sell, so Millie's father bought the land and became the owner of Pearson's Falls and the valley and mountains on either side. He let the local people go to the falls anytime they wanted. They began calling it Pearson's Falls, thus the name still is Pearson's Falls.

Then the Depression came. He had a small mortgage on the land and by and by the bank became the owner of the Pearson's Falls property. Millie's father knew some of the ladies in the Tryon Garden Club and he suggested to them that the club buy the property. That is what happened in 1930, and the club owns it to this day.

Millie was just three years old when this happened. Her earliest memory is of the time her family was forced to move out of their house (because of the Depression) and move into another house nearby built by her grandfather. She remembers traveling on a wagon pulled

by a mule. She had dreams of this huge change in her world, of seeing her first house off a little ways and not being able to go to it. She remembers when they got to move back to their house some time later. She remembers the wagon loaded with furniture, and she remembers how her mother had them all scrubbing the walls of their old house to get it nice and clean and to rid it of the cinch bugs.

Millie loved playing at the waterfall when she was growing up. There was a swimming hole up above the falls where the children could go to swim and have fun. She learned the names of the flowers and trees from her father. They had a whole set of nature guide books at their house and Millie has them still. Her father was a naturalist and wrote articles about nature for the Polk County News. Millie still has these too. Millie had a great love for nature as a child; she remembers how, in the spring, when the wild flowers were blooming, she'd gather up specimens, press them, and make nature scrapbooks for school.

Her father was Justice of the Peace in Saluda. People would come up from South Carolina in the spring and summer and picnic along the road where the Pearsons lived. They'd pick flowers and even dig up plants to take home. Millie's father had a deputy come to patrol the area on Sundays. When the deputy would catch people picking and digging up flowers he'd arrest them and take them to Millie's house, where her father would fine them for destroying wild plants. Millie remembers how some of them would throw down their flowers angrily before paying the fine.

When Millie graduated from school, she first went to Massachusetts to be with a sister and brother in law, who was managing a flight training school for men on the GI Bill. She'd do bookkeeping and typing and on the weekends she'd sometimes go flying. On occasion, she even got to pilot the plane!

When her brother-in-law decided to quit the flight school, Millie went to South Carolina and picked peaches for a week. She got all covered with fuzz and got very tanned.

Then Millie went to Washington DC. She lived on Connecticut Avenue in an apartment with two of her sisters. She worked for one of them, typing, picking up lunches for the office, and taking cabs around town to deliver things. She did this for five years. Then she decided to not do this anymore and she quit.

She took a test, passed, and was hired to work for the Transportation Corps of the US Army. If Army equipment around the country had to be moved, it had to go through them. Millie sat at a typewriter with headphones on. She had to get all the information about what needed to be moved, and then she needed to call back and explain how it was to be done. After a year, this office disbanded for security reasons. Millie worked a while longer in Washington as secretary to the Section Chief.

She joined up with the Business Women's Club. The ladies were called the BGs. She volunteered in military hospitals, dancing with the guys. The Army gave military recruits tours of Washington DC, and Millie was a hostess, telling them about the monuments and buildings they were passing in the bus. The club went on trips to New York and various places. She played Canasta, joined a folk dance club and was even on TV doing folk dancing!

In 1956, her father died and Millie decided to go back home to Saluda to be with her mother. There was an office party when she left, and she got a complete set of luggage for a goodbye present. She put all her things (except the sofa) in her car (she'd learned to drive in downtown Washington, DC) and she drove back home.

She had no job but she was not worried. The next Monday she went to Asheville and got a job as Clerk Typist at the Air Weather Service. It took 1 1/2 hours to get up to Asheville from Saluda and 1 1/2 hours to get back home again. Over the years she got three outstanding performance reviews, each one with \$100 prize. She could type 80 words per minute.

After 26 1/2 years she retired. Millie joined the Carolina Mountain Club and went on a few walks with them. She didn't like the way the hiking club would pass flowers beside the path but wouldn't stop to look at them. One of the hikers, Bruce Leech, told her about the Botany Club. Millie joined the Botany Club and never walked with the Carolina Mountain Club again. She loved the Botany Club right away. She said in those days everybody brought a magnifying glass and an ID book and was very serious about learning the plants and identifying them correctly.

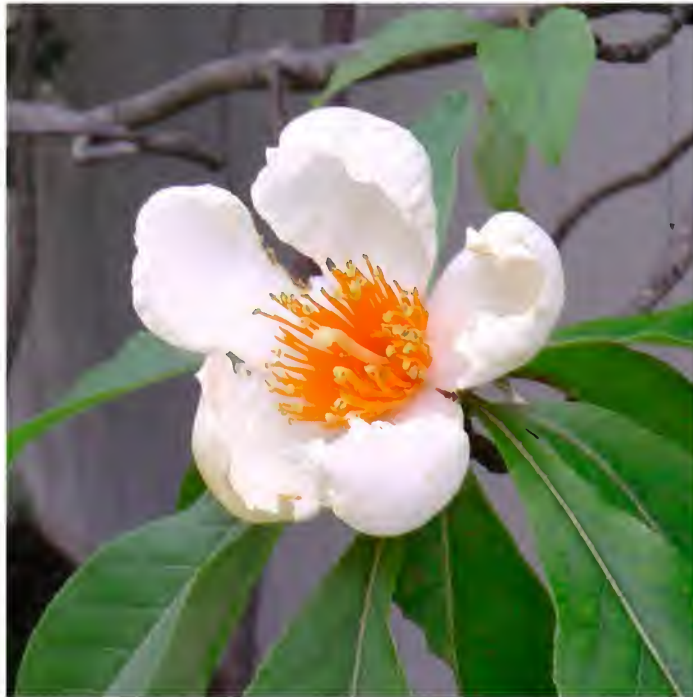
She got to know Dick and Jeanne Smith and they would sometimes come over and Millie would take them to plants that Dick needed to take pictures of for his book.

Every spring our Botany Club goes to visit Pearson's Falls, and Millie always leads us down the path, pointing out the flowers blooming all around us. After our walk we go to Millie's house where we all sit on the front porch and have lunch and then have a grand dessert of the tasty things Millie has set out for us: Banana pudding, cakes, popcorn and peanuts, and punch. Then we go on a little walk through Millie's garden where the wild violets are blooming and the creek is splashing by and the chickens and ducks are wandering cheerfully about.

Thank you so much Millie for all the happy times we've had with you, botanizing at Pearson's Falls and up to the railroad tracks at Twin Bridges, and for all the lovely lunches we've enjoyed on your front porch. Thank you too for this very special interview you've given to us. Lots of love to you from all of us in the Botany Club!

A Rare Tree Grows at Brevard College Walk

(Adapted from an original article by Dean Crawford, former member of WCBC and resident of College Walk by Jeanne M. Smith, current member of WCBC and resident of College Walk.)



Shortly before the American Revolution some very unusual trees were discovered along the Altamaha River in Georgia by the American botanist John Bartram and his son William. They took a few with them to plant at home in Philadelphia. Later William went back to the site and obtained specimens to send to England where other botanists confirmed that it was a never-before-seen tree. William gave it the Latin name *Franklinia altamaha* in honor of his friend Benjamin Franklin. By 1800 it had been declared to be extinct in the wild.

Franklinia trees are now very rare, since any now living can only be descendants of those in the Bartram Philadelphia gardens. Miles Peelle, an early resident of College Walk, planted a Franklinia tree at the west wing of College Walk Lodge at its completion in 1987. One of the unusual characteristics of this rare tree is that it blooms in late summer or early fall, in contrast to most other trees which bloom in spring.

A former resident of College Walk, Raymond T. Fox, Professor Emeritus of Horticulture at Cornell University in Ithaca, New York, stopped by this week to check on this rare tree and was delighted to find it in bloom. Since there are a number of members of the Western Carolina Botanical Club (WCBC) currently in residence at College Walk, we were pleased to assure him that the tree would be well appreciated and that there are now a number of Franklinia trees growing in the vicinity of Brevard, one in the Botanical Gardens of Asheville, one each in private gardens in Black Mountain and Flat Rock, and 6-8 at the Asheville Arboretum. We hope Professor Fox will return next summer to find several Franklinia trees in full bloom.

Notes from 1989 Autumn SHORTIA

(Here is an article written by Miles Peelle, the man who planted the Franklin Tree at College Walk. This article appeared in the Autumn 1989 SHORTIA.)

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NOTES ON THE FRANKLIN TREE, FRANKLINIA ALATAMAHA.....Miles Peelle

Floral tree display in late summer and early fall is seldom spectacular -- in fact, few species bloom that late. The Franklin tree is the exception and well worth attention for its aesthetic and botanical interest. In many gardens this is the main attraction, just before the splendor of leaf color.

The Franklin tree is a curious survivor of habitat loss -- rescued without plan from total extinction. Its range in the Southeastern Georgia lowlands was probably very restricted long before the Bartams discovered it in 1765. The description recorded at that time is as a "curious shrub." Later in 1780 and 1790 William Bartram saw it again in a small area on the northeast side of the Alatamaha River, near the coast of Georgia. Later searches were made, but it has never been found in the wild since then. It is thought that William Bartram planted seeds in the Bartram garden in Philadelphia; trees from the garden were available soon thereafter to spread the trees to many locations.

Strange at it may appear, the tree cannot survive in plantings near its original early Georgia habitat. Perhaps the development since the late 1700's of cotton root rot is the inhibitor of the Franklin tree there. Plantings as far north as Southern Michigan and Massachusetts survive with protection; in the midsouth it does well.

The Franklin tree is a member of the Tea family and is closely related to the redbay (Gordonia lasianthus). Often Franklin trees are called the "Lost Gordonias." In winter the large silky buds protect it during moderate cold snaps. If leaves appear too early in spring, buds elsewhere are in reserve and take over after the basic buds are lost. In fall, leaves are orange to red in contrast to the large white camellia-like flowers. It grows well only in full sun. If you have never seen the lovely flowers in late September or early October, an excursion to Charles Moore's garden in Brevard would be rewarding -- white flowers as large as tea cups, filled with golden stamens!

Recently the Bartrail Association sold 10-14 inch potted seedlings at its annual meeting in Brevard. College Walk residents obtained some specimens, two of which are growing well this season. Perhaps these trees in the future will add to the beauty of the grounds with late summer bloom. [Data from Claire Sawyer "The Franklin Tree" in HORTICULTURE page 64 (July 1989), and W. & M. Duncan TREES OF THE SOUTHEASTERN UNITED STATES (Univ. Ga. Press, pages 195, 309 (1988))].



Friends of Plant Conservation

By Katherine K. Schlosser
President, Friends of Plant Conservation

Peering through a thicket of rhododendron, machete slicing through a wall of green darkness, Rob Evans inches toward a thin gleam of sunlight in the barely discernible distance. Searching the area described years ago by Aileen Steinberg as an enchanted garden, he thought, "This can't be it." He and Research Specialist Lesley Starke made their way into the heart of what had been a mountain fen filled with *Platanthera blephariglottis* (white fringed orchid), *Xerophyllum asphodeloides* (turkey beard), and *Sarracenia purpurea* and *S. jonesii* (purple pitcher plants and mountain sweet pitcher plant). It was now a dense forest, with little in the way of wildflowers.

After two years of selective removal of encroaching woody shrubs and trees, invasives, and restoration burning, Rob and his crew of staff and volunteers were able to identify the area as the bog seen by Steinberg and others. Tom Gibson, Univ. of Wisconsin-Madison, happened to have a photo of the fen (commonly referred to as Cedar Mountain Bog) taken in the early 1970s on a visit with Steinberg. In that old photo was a pine tree identifiable by its unusual shape. By standing in the location they decided must have been the viewpoint of the photographer, they could see that this was the right place.

Work continues on restoration of the bog, as it does on the 23 preserves of the NC Plant Conservation Program (NCPCP) across the state, each protecting imperiled plant species in their natural habitats. The bog now teems with wildflowers, the hydrology of the site is recovering, and the future looks promising.

The NCPCP is small. Tucked into a few little offices in the Plant Industry Division within the NC Department of Agriculture and Consumer Services in Raleigh, it is charged with the mission to protect and augment populations of 421 endangered, threatened, and special concern plant species. The program currently manages 14,000+ acres—with a full time permanent staff of 2. An Information Technologist keeps things running in the office and manages the Ginseng program, and a Research Specialist monitors federally listed species.

Two temporary staff positions are filled when grant funds are available. It is a small staff by any measure with an immeasurably large task.

To help with this work, the Friends of Plant Conservation was organized in 2008 to provide much needed support. Raising funds for equipment, matching money for grants, land acquisition and management, and other items not covered by declining state budgets keeps us busy. The Friends also assist with public education efforts, the most recent being the popular Cedar Mountain Bog symposium in celebration of International Bog Day on July 29th.

Friends offer their assistance with their expertise (plants, geology, hydrology, mammals, insects, birds, soil), talents (photography, writing, art & design), and skills (nonprofit management, finances & fundraising, legal, education), and manual labor (invasives removal, plant monitoring). Together, the staff and volunteers work toward the same goal—to preserve and protect North Carolina's imperiled plants and unique habitats for now and for future generations.

We are a small group, currently boasting 250+ loyal and dedicated members. We have frequent opportunities to visit preserves, which are open by permit only, and observe the problems, needs and restoration efforts for the imperiled species on the sites. Often accompanied by experts in the fields of entomology, herpetology, hydrology, geology, botany, and dendrology makes these trips exceptional.

Preserves are different from other public lands, as the mission is preservation rather than recreation. There are no trails, directional signs or facilities; entering on your own increases the likelihood that you will become lost, may venture onto private property, and could be dangerous to you physically (rough terrain, risky areas), as well as possibly hazardous to protected plants and wildlife. Therefore, group visits are limited to 10-15 persons. Preserves may be closed for many reasons, including current management activities (fire, felling trees, etc.), the fragile nature of the site, and other reasons of safety.

Access permits are granted to individuals for specific purposes and limited time, mostly to research scientists who will add to the knowledge about a site or plant and ultimately benefit the site.

There is much to learn on NCPCP preserves, and much more land to protect. The Friends of Plant Conservation needs your help to acquire and manage sites identified as important for the Endangered, Threatened, and Special Concern species they sustain.

We would be delighted to have you join us as we continue to learn about and preserve the beauty of North Carolina.

You can join by visiting our website: www.ncplantfriends.org or by sending an email to kathyschlosser@triad.rr.com or admin@ncplantfriends.org for more information.

A small group of thoughtful
people could change the world.
Indeed, it's the only thing that ever has.

Margaret Mead

Oak Leaves in the Fall

by Lucy Prim

In the fall, when we go out on our Botany Club walks, one of the fun things I always do is pick up pretty fall leaves lying on the path and try to figure out what trees they are from. For me, it has been hard to remember what features the various oak leaves have and how to tell them apart. This year I was trying to think of a way to remember and I came up with a funny memory aid. It is to associate the different oak leaves with characters from *Gone with the Wind*.



The White Oak leaf, which has neither teeth nor hair, corresponds to Melanie and her sweet, loving personality.

The Scarlett Oak leaf, with its shiny surface, deep sinuses, teeth and wispy spider web-like hairs in the vein axils underneath, corresponds to Scarlett O'Hara, with her shiny eyes, tiny waist and her slightly wild personality.



The Black Oak, with its teeth and very hairy leaf, corresponds to the daring and dangerous Rhett Butler.



The Northern Red Oak, with its symmetrical, well balanced shape, corresponds to the dependable, gentlemanly Ashley. This leaf also has teeth and sometimes a little bit of hair in the axils of the veins underneath, Ashley not being entirely without a portion of animal spirits.

Southern Red Oak has a bell shape at the base, and I can remember this by thinking "Bell" as in Southern Belle, thus bringing to mind "Southern Red Oak"



The Chestnut Oak is easy to remember; its leaves are broadest above the middle and gray-green below, while the Chinkapin Oak has elliptical leaves with a hairier, paler underside.

According to Ron Lance's booklet, "Woody Plants of the Blue Ridge" we might see 16 Oaks here in our mountains, but I think the ones we mostly see on our walks are these seven. If we see an Oak leaf that doesn't fit any of these descriptions, we can try to ID it, using various books and the computer. And if we still can't ID it, then that might be because it is a hybrid, or maybe it is just an odd leaf. When I was looking at Oak leaves over at Carl Sandburg's, I found great varieties of leaf shape on one branch of a small Black Oak growing beside the path. Just inches away from each other on a twig were leaves that had no lobes at all, and leaves with the typical number of lobes!



Another consideration is that “sun leaves” growing on the upper branches can look different from “shade leaves” that grow on the lower branches, the sun leaves sometimes having much deeper sinuses than the shade leaves. And leaves from immature trees can be very different and surprisingly larger than leaves of mature trees.

With Thanksgiving coming up soon, it is interesting to think back on the Pilgrims and their first sight of this land when the Mayflower landed during November after their long trip across the Atlantic. Governor William Bradford, in his History of Plymouth Plantation describes their arrival:

“For summer being done, all things stand upon them with a weather-beaten face; and the whole countrie, full of woods and thickets, represented a wild and savage heiew.”

Donald Pettie, in his book “A Natural History of Trees” thinks that this “savage heiew” was the red of the Scarlet Oak, those trees being the ones that would have still had their leaves on that cold November day.



Fall, Leaves, Fall

Fall, leaves, fall; die, flowers, away;
Lengthen night and shorten day;
Every leaf speaks bliss to me,
Fluttering from the autumn tree.

I shall smile when wreaths of snow
Blossom where the rose should grow;
I shall sing when night's decay
Ushers in a drearier day.

Emily Brontë



SHORTIA
c/o Lucy Prim
48 Oak Gate Drive
Hendersonville, NC 28739

FIRST CLASS

SHORTIA

A quarterly publication of the Western Carolina Botanical Club

Vol. XXXVII No. 2

Editor: Lucy Prim [32Lucette@gmail.com]
Fall 2015

Proof-reader: Dave Lellinger

The purpose of the Club is to study the plants of the southern Appalachian Mountains and the Southeast through field trips and indoor meetings. **Membership is open to all.**

Individual/family memberships are \$15. New members joining from the period July 1 - December 31 pay \$8. All memberships are renewable on January first of each year. Send dues to Alan Graham, 544 Tip Top Road, Brevard, NC 28712.

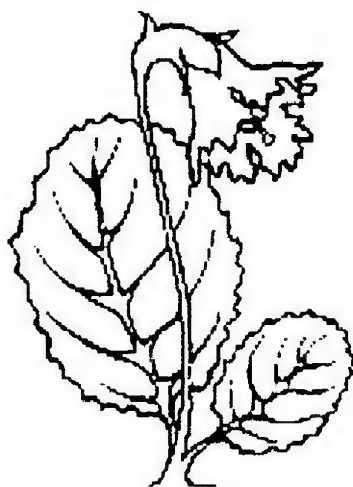
Please send me Botanical Articles or stories or tips on plant identification that you think would be good to include in one of our SHORTIAs. If you see anything that needs correction or if you have additional information about a subject or perhaps a personal experience related to a subject, send that in too, and I can include it in a future SHORTIA. Please try to get this to me by November 15th to include in the WINTER issue.

SHORTIA

NEWSLETTER OF THE

WESTERN CAROLINA BOTANICAL CLUB

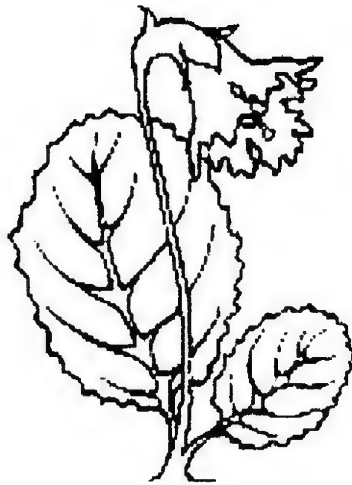
There was no XXXVII (03) Shortia



Shortia galacifolia

Oconee Bells

SHORTIA
NEWSLETTER OF THE
WESTERN CAROLINA BOTANICAL CLUB
WINTER 2015-2016



Shortia galacifolia

Oconee Bells

President	Penny Longhurst	Secretary	Kim Spencer
Vice-President	Susan Goldsworthy	Treasurer	Alan Graham



MEMBER NEWS

Field Trip Cancellations: Occasionally, field trips must be cancelled or changed either for weather conditions or other reasons such as road closings. Such changes are sent out by email to all members by 7 AM the day of the field trip. If you do not have email access, please call the leader, co-leader, or recorder (whose phone numbers are listed on the schedule) to be sure that the walk is going to go as planned. Indoor programs are cancelled when Henderson County Schools are closed (see <http://www.hendersoncountypublicschoolsnc.org>) but NOT necessarily cancelled because of delayed opening.

For any change of address, email or telephone number, please inform Alan Graham, 544 Tip Top Road, Brevard, N.C., 28712. 828-884-3947 adgraham@comporium.net



Attention: Membership Dues are Due January First

It is coming time to renew our membership in the Western Carolina Botanical Club! Checks can be brought to our Holiday Fest, or mailed to:

Alan Graham
544 Tip Top Road
Brevard, NC, 28712

Individual/Family Dues are \$15.



President's Message

by Penny Longhurst

Logging and Burning—Good, Bad, or Just Plain Ugly?

One Wednesday in late September, Bonnie, Juanita, and I met at Guion Farms in DuPont State Recreational Forest to scout the upcoming Wintergreen Falls field trip. We walked down Buck Forest Road happily botanizing away until suddenly we noticed large quantities of dead rhododendron and mountain laurel adjacent to our route. After closer examination we realized that the dead vegetation resulted from a burn. A little further on, the road turned to mush and we were confronted by the unmistakably ugly signs of a huge logging operation. We teetered onward but eventually were forced to recognize that this would not make for an ideal experience and we would have to come up with some other plans. Serendipitously, the weather on Friday was such that the field trip was cancelled anyway! However it got me thinking.

Earlier this year I was asked to write a letter on behalf of the Club condemning the proposed logging in the Big Ivy community. Well, of course! Who wants to see huge bulldozers squashing Pink lady slippers? Then in July, several Club members attended an International Bog Day symposium and heard how the mountain bogs are being restored by clear cutting encroaching rhododendron and mountain laurel and controlled burns. In the last few years I've come to recognize that the prized native shrubs near my own home also seem to swallow everything—true laurel hells. So, after the scouting failure I looked up the management plan for DuPont and found out some interesting things.

Forests in the Cedar Mountain vicinity, like much of the surrounding area, were extensively logged in the early 1900's. After the land was cleared, local farmers created meadows by burning and grazed their livestock there. Then in the 1950s, DuPont Corporation bought approximately 10,000 acres of land adjacent to the Little River and began operating a silicon chip and x-ray film production facility. They started a forest management program that included logging existing trees and replanting with white pine, and established a 330 acre white pine plantation near Guion Farms, the location of our field trip. Most of the meadows disappeared. Harvesting decreased during the ensuing years, with the result that most of the remaining trees are of a uniform age with a closed overstory canopy that decreases growth below. Furthermore, many of the trees have reached maturity and their quality is beginning to decline. DuPont State Forest was created in 1997. Its management is based on the concept of natural communities, something we're all becoming more familiar with, including a natural distribution of fauna which enhance wildlife habitat.

The old white pine plantation that we walked through is being logged and will be replaced with more diverse species to resemble the natural community typical of that area. Other areas are being managed on a smaller scale using a method called shelterwood cutting, which promotes growth of medium to low shade-tolerant species from naturally dispersed seeds. Many hardwoods, such as oak and hickory, can produce seedlings in light shade under a partially cut stand. However, they will not grow and develop fully until the remaining overstory trees are removed. I have first-hand evidence of that! Remember how last year we

had a huge acorn crop which quickly developed into acres of oak seedlings in the spring. I was really worried, but due to the rhododendron thickets that cover my property, this fall there were hardly any small oak trees to be seen!

Shelterwood cutting (sometimes in combination with burning) removes the mid- and lowerstory plantings and provides the desired species with just enough light and time to grow and “beat out” the less desired species. Then, once the desired species is established, some or all of the overstory trees can be removed. If they were removed at the start, whichever species grew fastest would become dominant. A reduced understory will probably also encourage growth of wildflowers which would otherwise also be shaded out.

I’ve discussed the Good and the Ugly, but of course there is also some Bad. This process of cutting and regeneration will take many, many years. Our field trips to the Thomas Cemetery will probably have to be postponed for quite some time. Logging always causes damage, but hopefully with time those wounds will heal. At least in DuPont there are existing roads and new ones do not have to be built. The burned areas that we passed on our scout were already starting to regenerate, much the same as they have along Highway 276 in Pisgah National Forest. Hopefully, the proposed plan to limit cutting outside the white pine plantation to small localized areas will reduce both the Bad and the Ugly and permit us to still enjoy our trips to the forest. Further information on the management plans for DuPont, including some useful maps, may be found at <http://ncforests-service.gov/contacts/dsf.htm>



Welcome to our New Member!

Donna Byce: Donna is a retired public school teacher, having taught special education in SC high schools. She has always enjoyed holidays and weekends in the mountains of WNC. Now she’s lucky enough to live here full time. She loves spending time on trails in the woods. Recently, she has taken classes in Water Quality and has done volunteer work in that area. Fly fishing is her new favorite thing as well as kayaking. When she can’t get outside, she enjoys reading, knitting, and playing cards with friends.

She looks forward to getting to know everyone in the Botany Club.



Annual Meeting Report

Our 42nd annual meeting was held at Holmes Educational State Forest on July 10, 2105. About 25 members and guests enjoyed friendship, huge amounts of delicious food, and committee reports. The weather was kind to us, with sunny skies and temperatures in the 80's. As usual, the tables were beautifully decorated with wild flower arrangements created by Dana Hermann.

Juanita Lambert, President, welcomed the attendees and announced that we currently have 85 club members of which 15 are new members. She encouraged members to volunteer to participate as walk leaders or co-leaders so we do not have to rely always on the same individuals.

Juanita reported that we have added two Member-at-Large positions to the Board. These individuals will learn how the Board operates, assist the scheduling team, and help the board make their numerous tough decisions. Bonnie Arbuckle is retiring as scheduler, and Mary Kathryn Hardman has accepted the appointment to take her place.

Alan Graham, Treasurer, reported that the club ended the year with a balance of \$6647.74. Ken Borgfeldt, Master Recorder, reported that we scheduled 34 walks last year. Only six were cancelled because of inclement weather. Bonnie Arbuckle gave the Bullington Report (printed elsewhere in this issue.)

Dana Hermann, for the Nominating Committee, proposed the following slate of officers, which was approved by the attendees:

President—Penny Longhurst
Vice President—Susan Goldsworthy
Treasurer—Alan Graham
Secretary—Kim Spencer
Members-at-Large—Frances Jones and Joe Standaert

Juanita then thanked the Board members for helping her during her term and especially thanked Joy Charlebois for her past service as Board Secretary. Jeanne Smith presented a plaque created by Lucy Prim to Bonnie Arbuckle in recognition of her dedication to the club and the significant contributions she has made to the club. The wording of the plaque reads *"To Bonnie Arbuckle, In appreciation for your scheduling management, the seasoning in the recipe for years of informative, rewarding Botanizing. Your friends in the Western Carolina Botanical Club."*

A moment of silence was held to remember Elaine Montgomery who passed away on May 15, 2015. Elaine was a member of the Club for more than 28 years and served as Treasurer.

The business meeting concluded with the ceremonial passing of the gavel and an invitation to lunch. During lunch Assistant Ranger Amy talked about volunteering opportunities at Holmes Educational State Forest and later led us on a walk to the Pollinator garden.

Our New Website

Western Carolina Botanical Club

The mission of the Club is to study and identify native plants and their habitats



The club has a new website! You can find it at <http://wcbotanicalclub.org/>. Let us know what you think of it. We are hoping that this will be a medium that will allow us to encourage more members to join the club.

On the site you'll find links to information about our history, you can download and/or browse all issues of Shortia from Volume I, Number 1 in 1979 to the present, see the "Look Again!" articles that Dick Smith thought were still current, and view local events that may be of interest to the club.

It will probably take a while before a Google search moves our site to its front pages, due to the competing presence out there of the Western Colorado Botanical Gardens, as well as several WCBC radio stations, colleges, bicycle clubs, and churches. The more you go to our link, the more likely we are to move up the website chart! It's still a work in progress, so feel free to send any comments or suggestions for things to include (or exclude) to wcbotanicalclub@gmail.com.



The path to Skinny Dip Falls

Indian Marker Trees

by Lucy Prim



Along Plantation Trail in DuPont Forest

This October, as a few of us were driving over to Sherwood Forest to do our Moss Walk, Ken Borgfeldt and Carol Toole and I got into an interesting conversation about “Indian Marker Trees,” those oddly shaped trees we occasionally see when we’re out on our Botany Club walks. Those trees are such curiosities, with their bent over trunks and then a gnarly knob that looks like a dragon’s head, and then the trunk growing up from the knob. We see trees like that along Plantation Trail at Dupont and beside the Shut In Trail near Mills Gap Overlook. There’s another one beside the path to Skinny Dip Falls. We were wondering whether these oddly shaped trees could really have been created long ago by Indians?

After doing a bit of research, I learned there are thousands of trees like these scattered about in the woods, not just here in North Carolina but throughout the Mississippi Valley and eastwards into the Appalachian Mountains. Some people are quite certain that some of them are indeed Indian Marker Trees, crooked on purpose to serve as guide posts pointing to such things as burial grounds, springs, and villages. Other people are skeptical and say the trees are just freaks of nature, their strange shape caused by storms or one tree falling and pinning another tree down.

People have been interested in these trees for a long time. A map, dated 1828–1844, illustrates and maps the locations of trees like these in Illinois. In the early 1900s, there was a sudden burst of enthusiasm about these trees, and people wrote articles and books on the subject and erected bronze plaques beside some of the trees. The bronze plaques stirred up controversy, and a man in the lumber business, George H. Holt, wrote to the Chicago Record Herald saying, “The erection of a bronze tablet to mark ‘The Indian Trail Tree’ at Glencoe ought not to pass unchallenged. It may be a pity to spoil a pretty conceit, but it is much

worse to invent a historical incident and to commemorate it by a tablet which must always discredit the perpetrators, the intelligence of the period and the trustworthiness of history.”

Laura Elliot Hubler, during her retirement years in the 1960s and 70s, embarked upon a crusade to get the trees recognized as important historical artifacts.

In 2007, another retiree, Don Wells, moved to North Georgia and formed the Mountain Stewards, a non-profit group that developed hiking trails in north Georgia and also located and preserved Indian cultural sites. Don said, “We started finding Indian trails that we could document from historical maps...and we were locating oddly shaped trees on these trails that had been bent by Indians.” Don, along with some other people, started up the “Tree Trail Project” to map and document these trees wherever they could be found. He and his wife published a book and created a documentary DVD, both titled “Mystery of the Trees.” On his website The Trail Tree Project, he writes, “Hiking along the crest of our mountain ridge in North Georgia, one has little question that the bent trees along the path are the living relics of a lost civilization.” He also says, “These unique trees are found throughout the United States, and are generally interpreted to be trail markers from our American Indian past. But, so far, we’ve mostly found speculative and anecdotal reports without much scientific study. We hope that we can provide a central registry for these trees and develop a community of interested parties who can respond to the questions these trees ask with a definite answer.”

A few months after Don started this project, he came into contact with Dr. Georgina DeWeese, an expert in dendrochronology (tree dating using tree rings.) She bored into some of the trees and was able to get two good core samples, allowing her to date the trees to 1771 and 1782. She believes that at least some of these distinctively shaped trees were shaped by man. “Looking at these trees on the landscape, it’s hard to dispute what they are. When you have a line of trees all pointing in the same direction and leading to water, it’s pretty convincing.”

Don says he rejects the vast majority of trees brought to his attention. “The trees need to be old enough to have been manipulated during the period when Native Americans were known to live in the area. In general, a tree must be greater than 20 inches in diameter unless there are other artifacts in the immediate vicinity.” The Tree Trail Project has documented more than 2,000 trees, most in the Southeast. Don wrote, “We are working with the federal, state, and county landowners to educate them about the trees and with that to hopefully preserve them. Unfortunately there are a lot of naysayers so we have our work cut out for us.”

Could the trees we see on our walks possibly be Indian Marker Trees? To me, the ones we see don’t look as old as the ones Don has pictured on his website. So maybe ours are not really Indian Marker trees. I just don’t know. Whatever they are, we can have fun wondering about them and marveling at their curious shapes.



Around 15 years ago, Betty Jones wrote a series of wonderful articles for Shortia titled "Those Latin Names". I thought it would be a good idea to reprint them. Most of us have never read them at all, and I am sure our long-term members will enjoy reading them again.

THOSE LATIN NAMES Betty Jones

Folks have asked what authority I am using for the plant names I use for our botanical walk checklists. Answer: For scientific names I am using Dick Smith's Wildflowers of the Southern Mountains and Wofford's Guide to the Vascular Plants of the Blue Ridge (©1989) for those species not included in Dick's book. Common names come from a variety of sources: Dick's book, Newcomb, Wofford .. but I try to include a name that the club has used in the past. Often I will show a second common name. If you are not native to this area (as few of us are), you may call a plant by yet another name.

For those of us who are newcomers to the field of botany, the Latin names can be intimidating. Why say *Trifolium repens* when White Clover seems so much easier? The reason, clearly, is that the Latin names are universal, understandable by Italian, Japanese or English speaking people alike. Not so the common names which are not even "common" to all parts of the English speaking world. So Latin it is.

What's in a name? ... a Latin name, that is. Quite a bit as it turns out. Let us consider a few simple Latin plant terms:

- *florus, flora, florum* Refers to the flower. Derived English words: flower, floral, florid
- *folius -a -um* Refers to the leaves. Derived English words: foliage, folio
- *foliatus -a -um* Same as above.
- *phyllus -a -um* Also refers to leaves, but the root of the term is Greek. Cooks will recognize this term in "phyllo", that extremely thin pasty dough.
- *petalus -a -um* Refers to petals, of course.
- *partitus -a -um* Refers to parts

Next we learn the number forms:

1-uni 2-di 3-tri 4-quad or quadri 5-quin or quinque 6-sex 7-sept 8-oct 9-nona 10-dec
12-dodeca 1000-mille

Now, let's look for combinations of them in our checklist plants:

Monotropa uniflora (Indian Pipe) - *uniflora* tells us that this plant has one flower in contrast to related species which have more.

Arisaema triphyllum (Jack-in-the-Pulpit) - *triphyllum* = three leaves.

Viola tripartita (Three-parted Violet) - Refers to the three parts into which the leaves are divided.

Panax trifolius (Dwarf Ginseng) and ***Panax quinquefolius*** (Ginseng). See how the names describe one obvious difference between them?

Consider these plant names. Do the names give you a clue to plant features?

Lycopus uniflorus
Orobancha uniflora
Cardamine diphylla
Angelica triquinata
Asimina triloba
Bidens tripartita
Delphinium tricombe
Galium triflorum
Magnolia tripetala
Porteranthus trifoliatus

Prenanthes trifoliata
Rudbeckia triloba
Sibbaldiopsis tridentata
Trifolium sp.
Trillium sp.
Zizia trifoliata
Asclepias quadrifolia
Lysimachia quadrifolia
Anemone quinquefolia
Angelica triquinata

Viola septemloba
Aesculus octandra
Agalinis decemloba
Dodecatheon meadia
Achillea millefolium

Next time:
Shapes and sizes

BOOK REVIEW

Waterfalls & Wildflowers in the Southern Appalachians. Thirty Great Hikes

by Timothy P. Spira. The University of North Carolina Press, 2015

Reviewed by Penny Longhurst

On Friday November 13th members of the Club enjoyed a Winter Program talk entitled “Exploring the Spray Cliff Community and Other Rocky Stream Habitats” presented by Dr. Timothy P. Spira, Emeritus Professor of Botany at Clemson University. Much of the information in his talk was taken from his new book “Waterfalls & Wildflowers in the Southern Appalachians. Thirty Great Hikes”.

This book is a great guide for any botanist who likes hikes that end up at a goal. Let’s face it, everyone loves waterfalls! And, as someone who successfully completed the [Carolina Mountain Club’s 100 Waterfall Challenge](#) (WC100) and hiked to more than 350 named waterfalls in the Southern Appalachians, I felt I had to read this book and see if there were any I’d missed (and there were)!

Part I, Introduction, explains how the guidebook is laid out. It describes the information provided at the beginning of each hike and provides some references for plant identification.

Part II describes 10 plant community profiles reflective of the locations described in the hike narratives in Part III. The community descriptions are a shortened version of those in Tim’s earlier book “Wildflowers & Plant Communities of the Southern Appalachian Mountains and Piedmont”; ideal for those of us who want to read just the basic information.

In Part III, Hike Narratives, day hikes to 30 different waterfalls or cascades are described; 3 located in Southern Virginia, 19 in Western North Carolina, 3 in Eastern Tennessee, 2 in Western South Carolina, and 3 in Northern Georgia. Locations range from the easy 1 mile hike to WCBC’s annual favorite, Pearson’s Falls, to a strenuous 8 miles round trip to Ramsey Cascades. The second time we hiked to Ramsey Cascade, both Howard and I decided “Never again!” but Tim told me after his talk that he hiked this trail about 12 times collecting information for his book—what a guy! Anyway, of the 30 waterfalls there were only 5 I have not yet visited, but which are now on the list for next spring. Several of the hikes described are to waterfalls where WCBC currently or in the past scheduled field trips, such as Moore Cove, Mouse Creek, Pearson’s, Station Cove, and Twin Falls. Material provided includes a good trail map, information about the best time to visit for flowers, the trail length and difficulty rating, and directions to the trailhead. A good overview of the history and/or plant community is also provided, along with a detailed description of the route and what plants you can expect to see as you walk along. Finally at the end of each hike description is a section titled “What to Look For,” where wildflowers expected to be seen in each season are listed with common name, scientific name, and the page number where the photograph and plant description can be found in Part IV. Usually the club visits these locations only once a year and generally during the same season. So it’s interesting to see what we may potentially miss by restricting our visits in that way.

In Part IV, Wildflower Profiles, descriptions and photographs of 125 wildflowers are nicely arranged by flower color and approximate blooming time. The profiles include most of the more common wildflowers we encounter during our field trips, and provide a useful and helpful guide for this area. However, despite a warning of the pitfalls of using potentially confusing common names in the Introduction, the description of *Chimaphila maculata* gives both Pipsissiwa and Striped wintergreen as common names. Sadly Pipsissiwa is the name most people remember because it has such a nice sound. However, I don't think I have ever seen a *Chimaphila umbellata* plant, which ITIS defines as Pipsissiwa! I was also confused by the mention of both Fairywand and Devil's bit in the description of Station Cove Falls. Maybe if we can persuade Tim to join the Club, we can properly educate him!

Dr. Spira's website can be found at <http://timothypsira.com/>



Thomas de Quincey's musings on the joys of winter!

"Let it, however, not be spring, nor summer, nor autumn, but winter, in its sternest shape. This is a most important point in the science of happiness. And I am surprised to see people overlook it, as if it were actually matter of congratulation that winter is going, or, if coming, is not likely to be a severe one. On the contrary, I put up a petition, annually, for as much snow, hail, frost, or storm of one kind or other, as the skies can possibly afford. Surely everybody is aware of the divine pleasures which attend a winter fireside - candles at four o'clock, warm hearth rugs, tea, a fair tea-maker, shutters closed, curtains flowing in ample draperies on the floor, whilst the wind and rain are raging audibly without... And it is evident that most of these delicacies cannot be ripened without weather stormy or inclement in some way or other... I can put up even with rain provided that it rains cats and dogs, or as sailors say, 'great guns and marline spikes;' but something of the sort I must have..."



Cats studying their Radford

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The purpose of the Club is to study the plants of the southern Appalachian Mountains and the Southeast through field trips and indoor meetings. **Membership is open to all.** Individual/family memberships are \$15. New members joining from the period July 1-December 31 pay \$8. All memberships are renewable on January first of each year. Send dues to Alan Graham, 544 Tip Top Road, Brevard, NC 28712.

Please send me Botanical Articles or stories or tips on plant identification that you think would be good to include in one of our SHORTIAs. If you see anything that needs correction or if you have additional information about a subject or perhaps a personal experience related to a subject, send that in too, and I can include it in a future SHORTIA. Please try to get this to me by February 23 th to include in the SPRING issue.
